Miele
PROFESSIONAL

PG 8172
PG 8172 ECO

Original operating instructions

for Miele commercial dishwashers PG 8172 and PG 8172 ECO

Table of contents

1 About this manual ---- 42
2 Safety notes ---- 42
2.1 Proper use ---- 42
2.2 Improper use ---- 42
2.3 Electrical safety ---- 43
2.4 Safety notes for maintenance and repairs ---- 43
2.5 General safety notes ---- 43
3 Before working with the machine ---- 44
4 Product description ---- 44
4.1 Mode of operation ---- 44
4.2 Special equipment ---- 44
4.3 Overview ---- 45
4.4 Display (Touchscreen) and start button ---- 46
4.5 The standard wash programme ---- 47
5 Rinse aid and detergent ---- 48
5.1 Rinse aid ---- 48
5.2 Detergent ---- 48
5.3 Suction tube with level control ---- 49
5.4 Changing the detergent product ---- 49
5.5 Priming the dispenser pumps ---- 50
6 Internal water softener (special equipment) ---- 50
6.1 Lack of salt display ---- 50
6.2 Filling regeneration salt ---- 50
7 Operation ---- 51
7.1 Before switching on the machine ---- 51
7.2 Switching on the machine and preparing it for operation ---- 51
7.3 Washing ---- 51
7.4 Switching off ---- 53
8 Servicing and maintenance ---- 54
8.1 Daily cleaning ---- 54
8.2 Weekly cleaning ---- 55
8.3 Monthly cleaning ---- 56
8.4 Descaling ---- 56
8.5 Maintenance by the Service Department ---- 56
9 Malfunctions ---- 57
9.1 Accessing the error code ---- 59
9.2 Poor cleaning result ---- 59
10 Info level 1 ---- 60
11 Info level 2 ---- 62
12 PIN menu ---- 63
12.1 General settings ---- 63
12.2 Automatic switch on / switch off ---- 65
12.3 Operating data ---- 66
12.4 Hygiene logbook ---- 67
12.5 Descaling / basic cleaning ---- 67
12.6 Changing the amount of detergent / rinse aid ---- 70
12.7 Resetting the water countdown indicator ---- 70
13 Integrated operating instructions ---- 71
14 Customer-specific modifications ---- 71
15 Installing the machine and tables ---- 71
15.1 Installing the machine ---- 71
15.2 Attaching the tables ---- 72
15.3 Converting the basket support ---- 72
16 Water connection ---- 73
16.1 Requirements for the on-site inlet water connection ---- 73
16.2 Requirements for the on-site water stop cock ---- 73
16.3 Connecting the supply hose ---- 73
16.4 Connecting the drain hose ---- 74
17 Electrical connection ---- 74
17.1 Connecting the mains cable ---- 75
17.2 Establishing an earth connection ---- 75
17.3 Connection diagram ---- 76
18 External dispenser pumps ---- 77
18.1 Terminals ---- 77
18.2 Electrical connection ---- 78
18.3 Setting the parameters ---- 79
19 Taking the machine out of service for a long period ---- 79
20 Putting the machine back into service after a long period of disuse ---- 79
21 Technical Information ---- 80
22 Emissions ---- 80
23 Disposal ---- 80

1 About this manual

These operating instructions will give you a quick overview of the main functions of your commercial dishwasher.

Please read through the safety notes carefully that have been listed here for safe handling of the PG 8172 commercial dishwasher.

The following symbols are used in these instructions:

Symbol	Meaning
Danger	Warning against potential serious or fatal injuries to persons if the described precautionary measures are not taken.
Warning	Warning against potential minor injuries to persons or potential material damage if the described precautionary measures are not taken.
Caution	Warning against defects in or destruction of the product if the described precautionary measures are not taken.
IMPORTANT	Important information is given here.
INFO	Useful information is given here.
➢	This symbol indicates instructions.
⇨	This symbol indicates results of your actions.
–	This symbol indicates itemisations.
▶	This symbol refers to a chapter with more detailed information.

2 Safety notes

2.1 Proper use

– The PG 8172 commercial dishwasher is a technical device for commercial use and is not intended for private use.
– Use the commercial dishwasher only for washing dishes such as plates, cups, cutlery and trays or for washing glasses of a gastronomic and related type.

2.2 Improper use

– This appliance can be used by children aged 8 and over and by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they are supervised or have been instructed concerning the safe use of the appliance and understand the resulting risks.
– Children must not play with the appliance.
– Cleaning and user maintenance should not be carried by children without supervision.
– Do not use the commercial dishwasher to wash electrically heated devices or parts made of wood.
– Do not wash without a washing basket.
– Do not wash parts made of plastic if they are not heat and lye-resistant.
– Use a suitable detergent to wash parts made of aluminium such as jars, containers or plates in order to prevent black stains.
– Miele does not assume liability for any damage caused due to improper use of the commercial dishwasher.

2.3 Electrical safety

– The electrical safety of this machine is guaranteed only if it is connected to a correctly installed protective circuit and a residual-current circuit breaker. It is very important that this basic safety requirement is tested and in case of doubt the installation must be checked by a qualified electrician.
  The manufacturer cannot be held responsible for damage caused by a missing or broken protective circuit (e.g. electrical shock).

2.4 Safety notes for maintenance and repairs

– Maintenance work and repairs may only be performed by authorised Miele service technicians. Improper maintenance or repairs may cause significant danger for the user, for which Miele is not liable.
– When performing installation and maintenance work, disconnect the machine from the power network. Electricity consumers (heating element, frequency inverter, ...) are under voltage until the on-site mains disconnector has been operated.
– Only original Miele spare parts may be used for maintenance and repairs. If original spare parts are not used, the warranty is invalidated.
– A damaged or leaking machine can endanger your safety. In case of defects, switch off the machine immediately. Switch off the on-site mains disconnector (main switch). Only then is the machine without power.
– Do not operate a damaged machine. In case of defects resulting from an unknown cause, switch off the machine, and switch it on again only when the defect has been rectified.
– Contact your installer and/or electrician if the on-site water and/or electricity supply is the cause of the malfunction.
– Notify an authorised service technician or your retailer if another fault has occurred.
– If the mains cable of this machine is damaged, it must be replaced by the manufacturer or his Customer Service or another qualified person in order to prevent hazards. The mains cable must be H07 RN-F type or equivalent.
– Do not spray the machine and the surrounding area (panels, base) using a water hose, steam-jet air ejector or high-pressure cleaner.
– Ensure that the base of the machine is not flooded when cleaning the floor in order to prevent an uncontrolled inflow of water.

2.5 General safety notes

– Read through the safety notes and operating instructions in this manual carefully. Retain the operating instructions for future reference. Miele does not assume liability or warranty in case of non-adherence to these safety notes and operating instructions.
– Use the commercial dishwasher only after you have read and understood the operating instructions. Allow the Miele Service Department to provide information about the operation and functioning of the commercial dishwasher. Always operate the machine as described in these operating instructions.
– Train the operating personnel as regards handling the machine and inform them about the safety notes. Repeat the training sessions at regular intervals to prevent accidents.
– For your safety, test the on-site residual-current circuit breaker (FI) regularly by pressing the test button.
– Close the on-site water stop cock after the work is complete.
– Switch off the on-site mains disconnector after the work is complete.

3 Before working with the machine

- Have the machine set up by an authorised service technician or your dealer (▶ 15).
- Have the machine connected as per the locally applicable standards and the regulations of the authorised mechanics (water, waste water, electrical system) (▶ 16 and 17).
- After connecting the water and the power properly, contact the relevant Miele Service Department or your dealer for the commissioning of the machine and for providing training in its operation. Have yourself and your operating personnel trained in the operation of the machine.

4 Product description

4.1 Mode of operation

The boiler and the tank fill and are warmed up to the operating temperature after the machine is switched on. During the heating phase, the lighting of the start button (3) changes gradually from red to green. When the target temperatures are reached, the machine is ready for use. The start button lights up green.

The machine is fully automatic with programmes consisting of three steps: Wash, Drain and Rinse. While a wash programme is running, the start button gradually changes from blue to green.

4.2 Special equipment

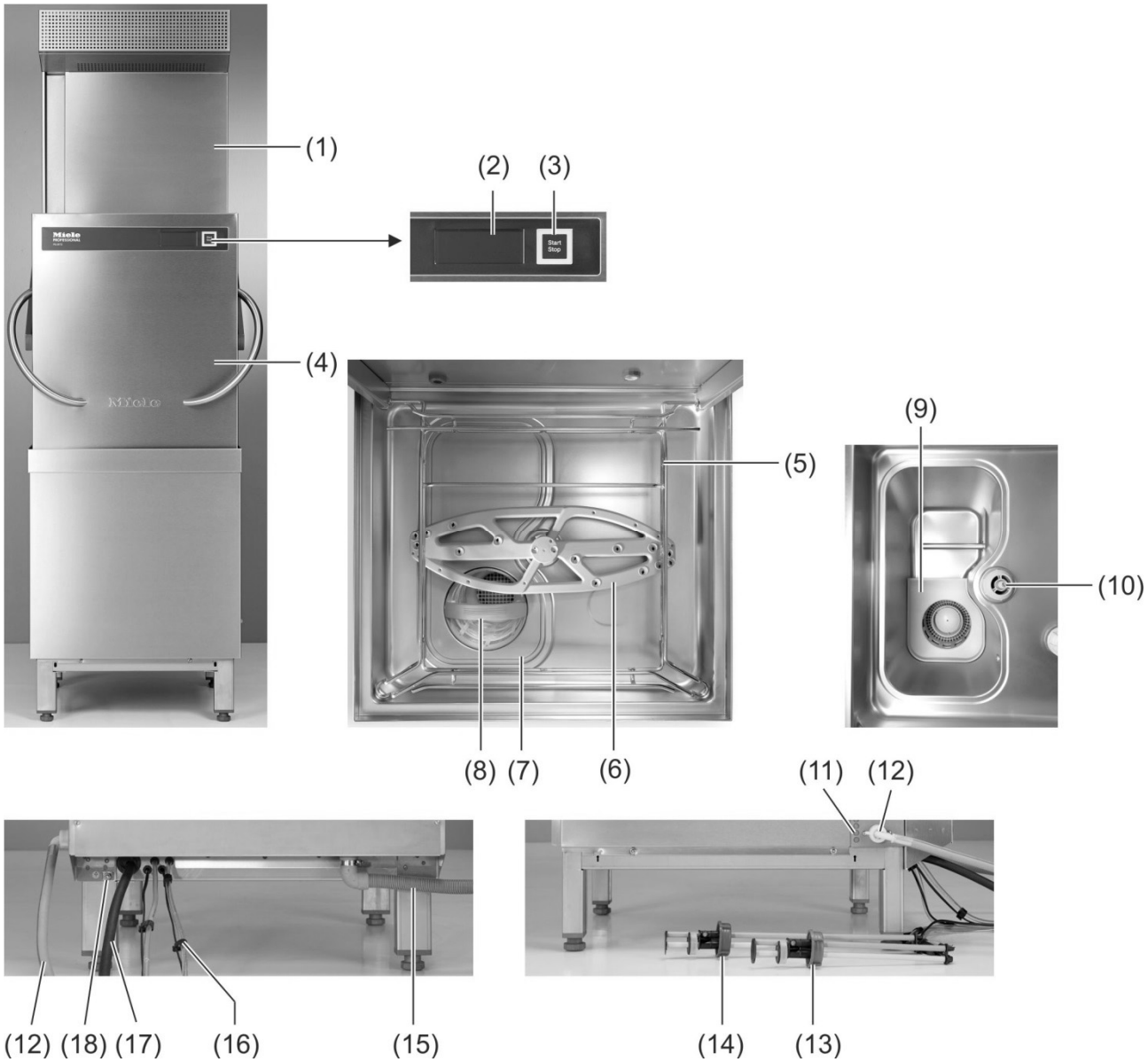
The following special equipment is available:

- **PG 8172 ECO (model)**
  The construction above the machine has a fan motor and a heat exchanger. After rinsing, the fan motor draws the steam and vapours (= exhaust air) out of the interior through the heat exchanger. The cold fresh water flowing through the heat exchanger condenses the vapours and is preheated for the rinsing of the next wash programme. Less energy is therefore required to heat the fresh water to the recommended rinse temperature. A waste water heat exchanger provides an additional energy gain. This system also sustainably improves the kitchen climate because when you open the hood there are less vapours from the machine.
  Requirement: Connect the machine to the cold water.

- **Automatic hood opening (special accessory to be installed by the service technician)**
  The hood opens automatically after each wash cycle.

- **Internal water softener (▶ 6)**

4.3 Overview



Pos.	Description
(1)	ECO module (acc. to equipment version)
(2)	Display (Touchscreen)
(3)	Start button
(4)	Machine hood (= hood)
(5)	Basket support
(6)	Lower spray arm
(7)	Tank cover
(8)	Filter cylinder
(9)	Pump inlet filter
(10)	Spray arm bearing

Pos.	Description
(11)	Bushings for cables and hoses
(12)	Water supply hose
(13)	Suction tube for rinse aid (red cover cap)
(14)	Suction tube for detergent (blue cover cap)
(15)	Water drain hose
(16)	Hoses and cables for the suction tubes
(17)	Mains cable
(18)	Connection for on-site equipotential bonding system

4.4 Display (Touchscreen) and start button

Activating the display

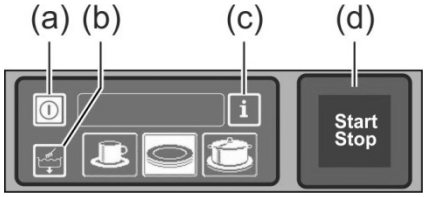
- Touch the display with your finger.
  - ⇨ The display turns on and then off again after a short time. This saves energy and prevents accidental switching on of the machine.

INFO Switching on the machine, see chapter ▶ 7.2.

On the screen touch-sensitive buttons are displayed. Operate the screen with your fingers only, not with sharp objects. Each touch of a button is confirmed by a beep. Events such as e.g. the end of the programme or malfunctions are indicated by a sequence of tones.

INFO The authorised service technician can deactivate the beep and the sequence of tones.

Operational state



(a) On/Off button
(b) Self-cleaning programme
(c) Switch to info level 1 → info level 2 → PIN menu
(d) Start button

Start button

The coloured lighting of the start button (d) has the following meanings:

Colour	Meaning
not lit	Machine is switched off
red	Machine is not yet ready for use
green	Machine is ready for use
blue	Machine is washing
red and green	Machine is filling and heating up
green and blue	Wash programme is running
blue and not lit	Self-cleaning programme is running
flashing green	Wash programme is ended; hood has not been opened yet
flashing green-blue	Only for PG 8172 ECO model machines: Vapours being extracted. The wash programme has not completely finished.

Menu levels

The machine electronic control unit is split into 3 levels:

- Level for the dishwashing staff (▶ 4.5)
- Info level 1 with additional wash programmes and information (▶ 10)
- Info level 2 with access to the PIN menu (▶ 11)

4.5 The standard wash programme

The wash programme display depends on which application the machine has been programmed for. If necessary, the machine can also be reprogrammed later.
Programme 2 is already pre-selected when the machine is ready. Another wash programme is selected by tapping. The selected programme is represented by a button with a white background.

Application of the machine	1 2 3	**Programme 1** for	**Programme 2** for	**Programme 3** for
Dishwasher		Slightly soiled dishes	Medium soiled dishes	Heavily soiled dishes
Glasswasher		Delicate glasses	Less delicate glasses	Robust glasses
Bistro dishwasher		Glasses	Glasses and cups	Plates
Bistro and cutlery washer		Glasses	Cutlery	Plates
Cutlery washer			Cutlery	

INFO The indicator on your commercial dishwasher may vary since the authorised service technician can display appropriate images for your machine from a collection of images. At your request, the service technician can also hide programmes.

GB

5 Rinse aid and detergent

Danger

- When handling chemicals, observe the safety notes and the dosage recommendations on the packaging.
- Use only chemicals recommended for the purpose by the manufacturer to avoid violent chemical reactions (such as a detonating gas reaction) and material damage.
- Do not mix any chemicals as unforeseen chemical reactions could result.
- Additional products that enhance the cleaning must be approved for use in a commercial dishwasher. If in doubt, ask your dealer.
- Wear protective clothing, protective gloves and protective goggles when handling chemicals.

Caution

- Use only products that are suitable for commercial dishwashers. Such products are appropriately marked.
- Do not fill detergent in the container for rinse aid and vice versa.

5.1 Rinse aid

Rinse aid is necessary to ensure that water on the dishes drains off after washing and dries off after a short while. Rinse aid is automatically metered from an external container. The rinse aid dispenser pump is an internal component of the machine.

The dosing amount is set by the authorised service technician when commissioning the machine (▶ 12.6).

INFO When using an external dispenser pump, a transfer strip is available for connecting the dispenser pump (▶ 18).

5.2 Detergent

Caution

- Do not use acidic cleaners.
- Do not mix different detergent products in order to prevent crystallisation which could destroy the detergent dispenser pump (▶ 5.4)
- Do not use products that can create foam, e.g. hand soap, soft soap, manual washing-up liquid. Ensure that these do not enter the machine even during the pre-treatment of the utensils.

A detergent is necessary to ensure that the leftovers and dirt on the dishes is cleaned. Detergents can be dosed as follows:
- Manually as detergent powder.
- Automatically from an external container using a detergent dispenser pump.

INFO The detergent dispenser pump is not included in the scope of delivery of all machines. When using an external dispenser pump, a transfer strip is available for connecting the dispenser pump (▶ 18).

5.2.1 Manual dosing of detergent powder

Danger

Avoid inhaling powder cleaning agents. Swallowed cleaning agents can cause burns in the mouth and throat or lead to suffocation.

Pre-dosage
- ➢ Switch on the machine and wait until the start button is lit green.
- ➢ Adhere to the dosing instructions on the packaging of the detergent. The machine's tank capacity is approx. 35 litres.
- ➢ Place approx. 100 g of detergent powder in the machine. This corresponds to a dosing of approx. 3 g/l.
- ➢ Then start the wash cycle immediately to mix the detergent powder with the water.

Additional dosage
At each wash cycle approx. 2.0-2.5 litres of fresh water enter the commercial dishwasher, which must be mixed with detergent powder.
➢ After 5 wash cycles, fill approx. 30 - 40 g detergent powder into the machine.

5.2.2 Automatic dosing of liquid detergent

The dosing amount is set by the authorised service technician when commissioning the machine (▶ 12.6).

5.3 Suction tube with level control

Caution

– Only use the suction tube with sufficiently stable containers. Narrow and tall containers can tip if the suction tube is pulled.
– Do not place the suction tube for the rinse aid in the container with detergent or vice versa.
– Do not pull unnecessarily on the suction hose or main power cable, as this may lead to a defect.

According to the model, with your machine you may have one or more suction tubes. The suction tube is already connected to the machine.

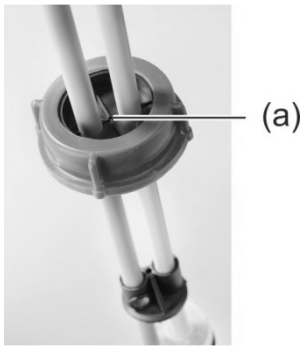
Figure 1

Figure 2

Figure 1:
Suction tube for detergent
Blue cap

Figure 2:
Suction tube for rinse aid
Red cap

Servicing and maintenance



➢ Rinse the suction tube at every container change under running water. Remove crystallised detergent residue.
➢ Ensure that the vent hole (a) in the cap is not obstructed.
➢ Put the suction tube back into the container. Slide the cap downwards until the container opening is closed.

5.4 Changing the detergent product

Caution

– Mixing different detergents can lead to efflorescence that can lead to a failure of the dispenser pump. This is applicable even if the new detergent is from the same manufacturer.
– The dosing tubes and the detergent dispenser pump must be thoroughly rinsed with water before the new detergent is used.

➢ A new detergent product usually requires a new setting of the dispenser pump. Assign the required work to an authorised service technician to attain good cleaning results.

If this is not done, Miele's warranty and product liability is invalidated.

Procedure:

Danger

- When handling chemicals, observe the safety notes and the dosage recommendations on the packaging.
- Wear protective clothing, protective gloves and protective goggles when handling chemicals.
- Do not mix different detergents.

- Remove the suction tube from the container and place it in a water-filled container.
- Rinse the dosing tubes and the detergent dispenser pump with water. To do this, use the prime dispenser pump function several times (▶ 10). The frequency depends on the length of the dosing tubes.
- Place the suction tube in the new detergent container.
- Use the prime dispenser pump function several times (▶ 10), to replace the water in the dosing tubes with detergent.

5.5 Priming the dispenser pumps

Dispenser pumps must be primed if air gets into the dosing tube because the containers were not exchanged or refilled in time (▶ 10).

6 Internal water softener (special equipment)

By softening the inlet water, limescale build-up in the machine and on the dishes is avoided. For the internal water softener to work correctly, the salt container must be filled with regeneration salt.

INFO At the commissioning of the machine the authorised service technician measures the water hardness and saves it in the machine's electronic control unit.

6.1 Lack of salt display

A pictogram appears on the screen when an empty salt container requires refilling. The display disappears after filling the salt container, as soon as approx. 3 wash cycles have been completed and part of the salt has been dissolved.

6.2 Filling regeneration salt

Caution

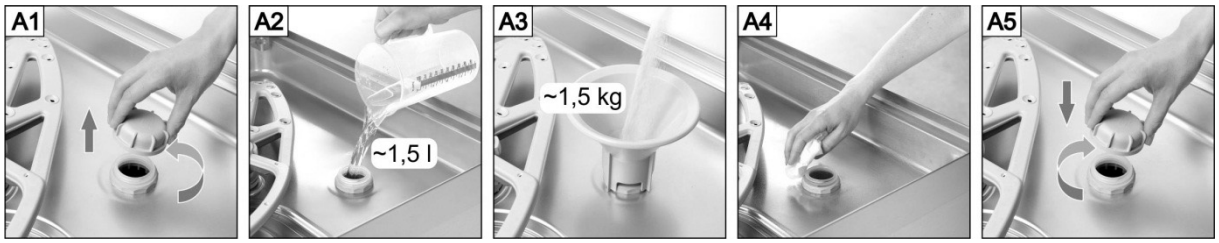
Possible risk of damage to the water softener
Chemicals such as detergent and rinse aid inevitably lead to damage to the water softener. Fill only with regeneration salt or pure evaporated salt.

Possible malfunction of the water softener
Do not fill with other salts (e.g. table salt cleaning or de-icing salt). These can contain water-insoluble components. Fill only with fine-grained salt (max. 1 - 4 mm grain size).

INFO Because of their size, salt tablets are not suitable.

- Proceed in accordance with Figures A1 to A5.

IMPORTANT Figure A2 is only relevant for the first filling.



Caution

Risk of rust formation in the filling area
Immediately after filling, start a wash cycle to rinse off any salt residue.

7 Operation

7.1 Before switching on the machine

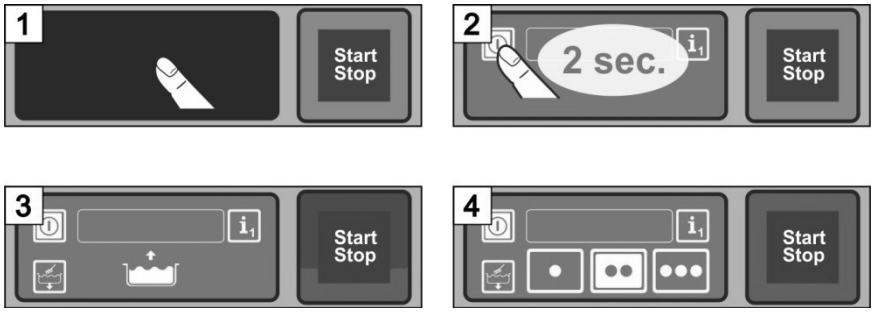
Caution

Possible risk of damage due to suction of items from within the machine e.g. pieces of cutlery
The pump inlet filter protects the circulating pump and the drain pump. Operate the machine only with the pump inlet filter fitted.

- Open the on-site water stop cock.
- Switch on the on-site mains disconnector.
- For your own safety, test the on-site residual-current circuit breaker (FI).
- Open the hood.
- Remove the filter cylinder (1).
- Check whether the pump inlet filter (2) is fitted. If it is not fitted there will be an error message when the machine is switched on.
- Insert the filter cylinder (1).
- Check whether the spray arms (top and bottom) are fitted and properly engaged.
- Close the hood.
- Check whether sufficient detergent and rinse aid are present in the containers. Replace the containers in time so that the cleaning results are not affected.

GB

7.2 Switching on the machine and preparing it for operation



7.3 Washing

Caution

Possible risk of scalding from hot wash water
- Keep children away from the commercial dishwasher. The wash water in the interior is at a temperature of approx. 62 °C.
- Do not open the hood while the machine is washing. There is a risk of the hot wash water spilling out. Stop the wash programme before doing so (▶ 7.3.7).

Possible risk of injury
- Do not place any objects on the hood.
- Arrange sharp, pointed utensils so that they do not cause injury.

Possible failure of the wash programme due to heavy dirt ingress
- Pre-rinse all dishes and pans with **cold** water. Remove food residues.

IMPORTANT Do not place any heavy objects on the hood, so that the hood can always be opened easily and cannot close accidentally on its own.

7.3.1 Arranging the dishes in the washing basket

Dishes and cutlery

- Place plates with their front side facing forwards.
- Place cups, bowls and pots rim down.
- Wash cutlery either standing in the cutlery holder or lying in a shallow basket. Make sure that they are not too close together. Soak cutlery, before you wash it.
- Position knives and other sharp objects in the cutlery holder with the handle up in order to prevent injuries.

Glasses

- Pour out drink residue (not in the machine).
- Remove scraps of paper.
- Rinse off ash with water.
- Place glasses rim down.
- Keep space between the glasses, so they do not rub against each other. This will avoid scratches.
- For tall glasses choose a basket with appropriate divisions so that the glasses are held in a stable position.

7.3.2 Using automatic hood start

➢ Select a wash programme (▶ 4.5).
INFO The wash programme remains pre-selected until a different wash programme is selected.
➢ Slide the washing basket into the machine.
➢ Check that the upper and lower spray arms are free to turn.
➢ Close the hood.
⇨ The wash programme is started.

7.3.3 Interrupting automatic hood start

➢ Do not close the hood completely, but only as far as the lower detent position.

INFO The automatic hood start can be deactivated by an authorised service technician (P516). Every wash programme must then be started by pressing the start button.

7.3.4 Changing the wash programme

➢ Select a different wash programme by tapping the button (▶ 4.5).
⇨ The background of the button becomes white.
➢ Close the hood.
⇨ The wash programme is started.

7.3.5 Intensive programme

If the stains are particularly dried in, the wash programme can be intensified.

➢ Close the hood and press the start button twice in short succession ("double click").

⇨ In the info field, the "Brush" icon flashes.
INFO The intensive programme only affects the current wash programme and is then automatically deactivated again.

7.3.6 End of the programme

The start button **flashes green**, as soon as the wash programme has ended and the hood remains unopened.

Only for the PG 8172 ECO model

At first, the start button **flashes blue-green**. At the same time, the steam and vapours are extracted from the washing compartment and the heat energy stored in them is recovered for the next wash cycle. If possible, do not open the hood yet at this time.

The start button **flashes green** as soon as the warm air is extracted.

7.3.7 Prematurely terminating the wash programme

A wash programme can be terminated in the following ways:
- Press the start button
- On the screen, tap on the button of the selected wash programme

7.3.8 Periods of disuse

Do not switch the machine off during periods of disuse.
➢ Close the hood as far as the detent position to prevent it cooling down.

7.4 Switching off

Switch the machine off at the end of the working day using the self-cleaning programme (▶ 8.1.2), so that it is cleaned and emptied every day.

INFO If you use the On/Off button, the tank stays filled but will no longer be kept at temperature. If the tank temperature has dropped too much before the machine is switched on again, the machine will be emptied automatically and filled again.

8 Servicing and maintenance

Warning

- Do not spray the machine and the surrounding area (panels, base) using a water hose, steam-jet air ejector or high-pressure cleaner.
- Ensure that the base of the machine is not flooded when cleaning the floor in order to prevent an uncontrolled inflow of water.

Warning

Wear protective clothing and protective gloves before touching parts in contact with wash water (filters, spray arms, ...)
When cleaning the machine Interior, wear protective gloves to avoid injury caused by sharp-edged trays.

8.1 Daily cleaning

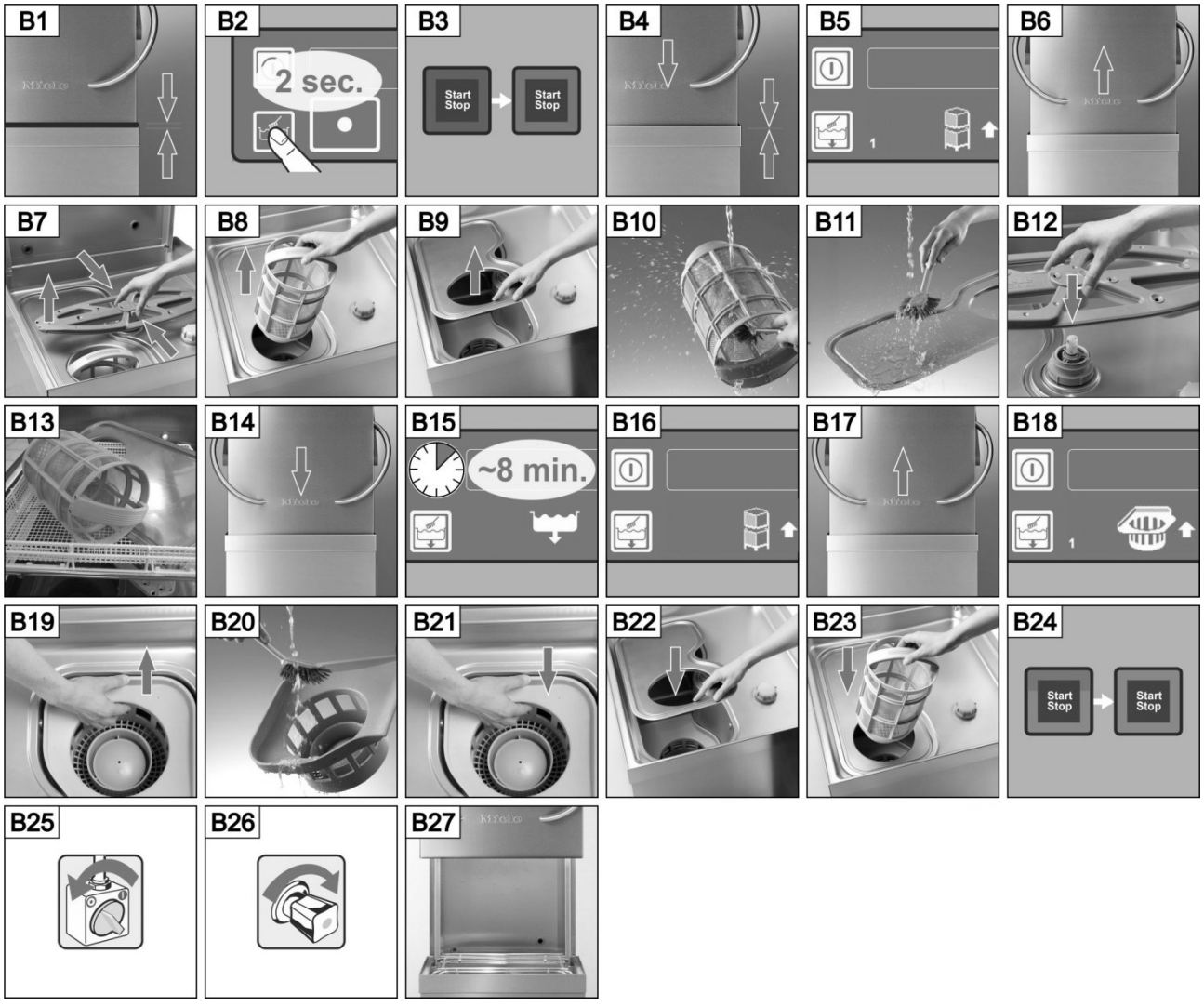
8.1.1 During operation

Remove the filter cylinder, clean if necessary and re-insert it.

8.1.2 Self-cleaning programme at the end of the working day

The machine is equipped with a self-cleaning programme that assists you when you are cleaning the inside of the machine. After the first programme step, the self-cleaning programme is interrupted so that you can remove the filter cylinder and the tank cover and clean them. If you do not follow this step, the self-cleaning programme will continue automatically after 30 seconds.

➢ Proceed in accordance with Figures B1 to B27.



Terminating the self-cleaning programme:

- Press this button.
  - ⇨ The background of the button becomes blue.
  - ⇨ The machine is filled again.

8.1.3 Cleaning the interior

Caution

Ensure that there are no rusty foreign objects in the machine which can also cause the "stainless steel rust-free" material to start rusting. Rust particles can come from non-rust-free dishes, cleaners, damaged wire baskets or non-rust-protected water lines.

The following materials must **not** be used for cleaning:

- High-pressure cleaner
- Detergents containing chlorine or acid
- Cleaning sponge or wire brush containing metal
- Abrasives or abrasive cleaners

- Remove dirt with a brush or a cloth.

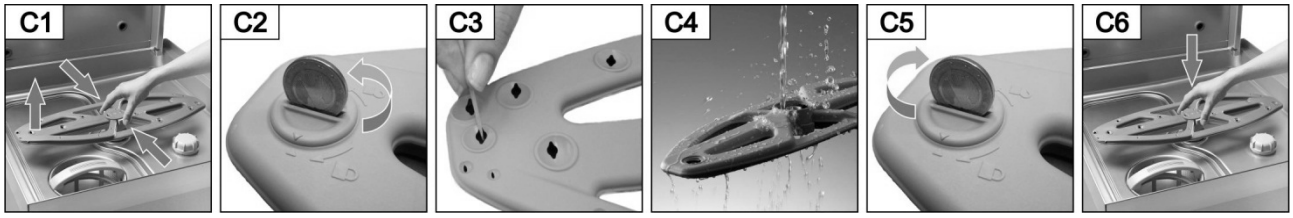
8.1.4 Cleaning the exterior of the machine

- Clean the display with a damp cloth.
- Clean the external surfaces using a stainless steel cleaner and stainless steel conditioner.

8.2 Weekly cleaning

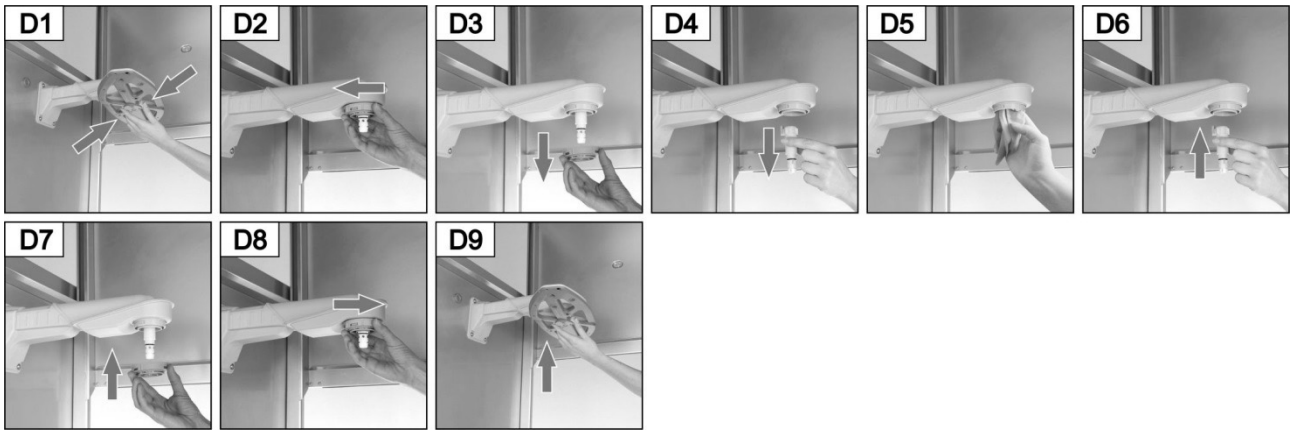
Cleaning the spray arms (top and bottom)

- Proceed in accordance with Figures C1 to C6.

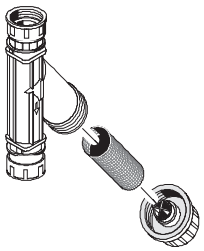


Cleaning the spray arm bearings (top and bottom)

- Proceed in accordance with Figures D1 to D9.



8.3 Monthly cleaning



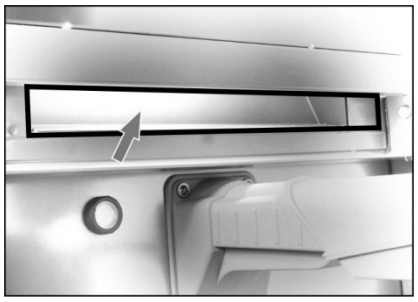
Cleaning the dirt trap

- Close the on-site stop cock for the water supply.
- Clean the dirt filter in the dirt trap.

Only for the PG 8172 ECO model

Cleaning the ECO module

- Slide the ventilation grille upwards and remove it.
- Clean the space behind the ventilation grille with a cleaning cloth.
- Wash the ventilation grille in the machine and then refit.



- Open the hood.
- Spray the suction channel with warm water. Use a water hose, not a high-pressure cleaner.
- Clean the suction channel with a cleaning cloth.

8.4 Descaling

If the machine is operated with water of high hardness without water treatment, descaling is necessary at regular intervals (▶ 12).

8.5 Maintenance by the Service Department

We recommend that you have an authorised service technician carry out the maintenance of the machine at least twice a year so that vulnerable parts can be checked and replaced accordingly. Original spare parts must be used for repairs and the replacement of worn parts.

Worn parts are, for example:

- Dosing tubes
- Bearings of the spray arms
- Hood seal
- Water supply hose

In the electronic control unit, the number of hours of operation or wash programmes before servicing should be performed can be programmed and at what number of hours of operation remaining the symbol for maintenance/service is displayed. If necessary, have this function activated by an authorised service technician.

9 Malfunctions

This chapter explains the remedies for malfunctions. The causes and remedies are specified in the tables. Contact an authorised service technician if you cannot rectify the error yourself.

Danger

Danger to life: Live components!
- Do not open any machine covers or machine parts if it requires tools. There is danger of shock.
- Only an authorised service technician should carry out work on the electrical system. The machine must first be disconnected from the mains.

Faults are displayed in the info field in the form of pictograms. In addition, every malfunction will be recorded in the hygiene journal (▶ 12) and can be retrieved in info level 2 (▶ 11). In both places, an entry is also made as soon as the malfunction has been removed.

GB

Pictogram	Meaning	Possible cause	Remedy
	Hood is open	Programme start with open hood	Close the hood.
	Detergent is empty[1]		Change the detergent container.
	Rinse aid is empty [1]		Change the rinse aid container.
	Lack of water	Water stop cock closed	Open the water stop cock.
		The dirt filter in the dirt trap is blocked	Remove and clean the dirt filter (▶ 8.3).
		Solenoid valve defective or blocked	Contact an authorised service technician for the repair.
	Internal water treatment is exhausted	Low salt	Fill the salt reservoir with regenerating salt (▶ 6.2).
	External partial or full demineralisation unit blocked		Exchange the partial demineralisation unit; exchange the core of the full demineralisation unit.
	Service interval is running out	The number of operating hours / washing cycles set in the controls has been reached. **INFO:** This function is not activated in factory.	Contact an authorised service technician for the maintenance.
	Need for descaling	The number of operating hours set in the control system has been reached.	Starting the descaling programme (▶ 12.5).

[1] is only displayed, when a suction tube with level control is used and connected to the machine.

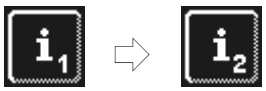
Malfunctions

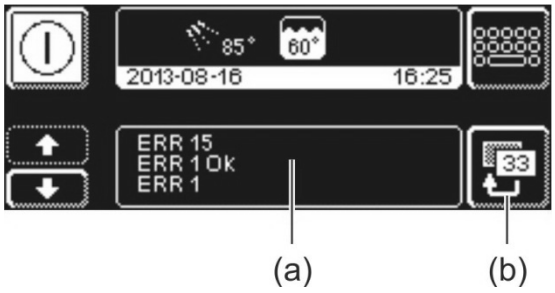
Pictogram	Meaning	Possible cause	Remedy
	Lower spray arm is blocked	Spray arm is not correctly engaged	Correctly engage the spray arm.
		Spray arm obstructed by, e.g. a piece of cutlery	Remove the obstruction.
		Spray arm blocked by soiling	Clean the spray arm bearings (▶ 8.2).
	Upper spray arm is blocked	Spray arm obstructed by, e.g. high dishes	Remove the obstruction.
		Spray arm blocked by soiling	Clean the spray arm bearings (▶ 8.2).
	Filter cylinder blocked	Heavily contaminated filter cylinder	Remove, clean and replace the filter cylinder.
	Energy optimization[1]	On-site energy optimisation equipment switches individual electrical consumers (heating elements).	Wait until the on-site energy optimisation equipment switches off.
	Pump inlet filter not fitted	Missing pump inlet filter ⇨ The machine switches off after 30 seconds and will not be filled.	Fit the pump inlet filter and, if necessary, switch the machine on again. **INFO:** When the prompt is downgraded three times, the machine can be switched on.
	Pump inlet filter not fitted despite three prompts	Missing pump inlet filter **IMPORTANT:** The circulating pump and drain pump may get damaged by drawing in, for example, pieces of cutlery.	Fit pump inlet filter.
	Automatic hood opening [2] defective.	Defective motor	Contact an authorised service technician for the repair.
	Tank will be filled	A wash programme is started while the machine is refilling	Wait till the machine has been filled.
	Malfunction with error code	Various	Display the error code (▶ 9.1) and assign the repair to an authorised service technician.

[1] is displayed only when the machine is connected to an equipment with energy optimisation
[2] Special equipment

9.1 Accessing the error code

In the display, the following symbol flashes:

➢ Tap the following buttons in turn: 



⇨ The error codes are displayed in area (a).

INFO Malfunctions already resolved are also displayed here (e.g. ERR 1 OK).

➢ Contact an authorised service technician for the repair.
➢ Press the button (b) twice to leave the menu.

GB

9.2 Poor cleaning result

	Possible cause	Remedy
The dishes do not get clean.	No or low detergent dosing	Set the dosing amount as per the manufacturer's specifications (▶ 12.6).
		Check the dosing lines (for kinks, breakage, ...) Exchange the container, if empty.
	Dishes incorrectly sorted	Do not stack dishes one over the other.
	Nozzles of the spray arms blocked	Remove the spray arms and clean the nozzles (▶ 8.2).
	Temperatures too low	Test the temperatures (▶ 10).
	Excessive dirt	Pre-rinse dishes.
Deposits form on the dishes.	In case of limescale deposits: The water is too hard	Check the water preparation. Carry out basic cleaning.
	With starch deposits: Temperature of the manual pre-cleaning (spray) is higher than 30 °C	Lower the temperature of the manual pre-cleaning. Carry out the basic cleaning programme (▶ 12.5.2).
The dishes do not dry on their own.	No or low rinse aid dosing	Set the dosing amount as per the manufacturer's specifications (▶ 12.6).
		Check the dosing lines (for kinks, breakage, ...) Exchange the container, if empty.
	Rinse temperature too low	Contact an authorised service technician.

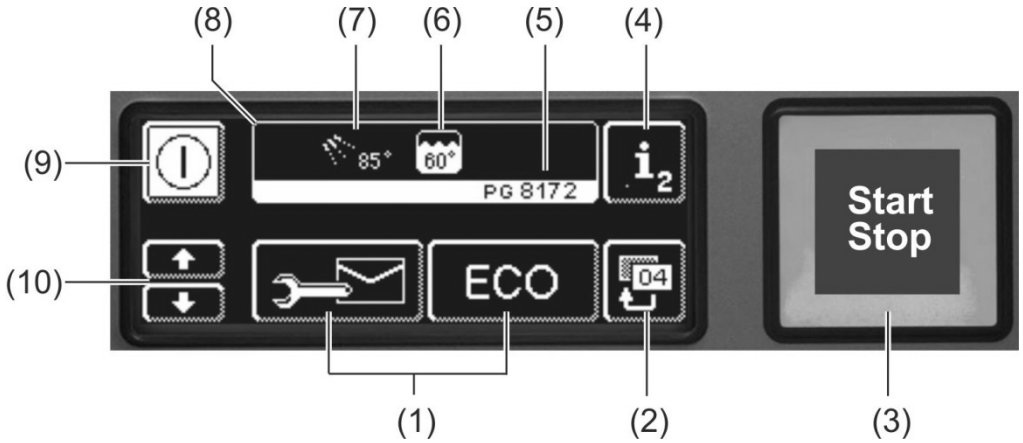
For machines without an internal water softener:

INFO The water quality affects the washing and drying performance. We therefore recommend from a total hardness of more than 3° dH (0.53 mmol/l) that the machine is supplied with softened water.

10 Info level 1

Calling info level 1

➢ Press the following button:



(1)	Buttons for retrieving information, the priming of the dispenser pumps and the selection of additional programmes
(2)	Back button
(3)	Start button
(4)	Switch to info level 2 (▶ 11)
(5)	Type designation
(6)	Current tank temperature
(7)	Current rinse temperature
(8)	Info field
(9)	On/Off button (tank will then not be emptied)
(10)	Scroll buttons of area (1)

Buttons of area (1)

Addresses

➢ Press the button.
  ⇨ The following 2 addresses appear:
  – SERVICE: Address of the service technician
  – CHEMICALS: Address of the chemicals supplier (rinse aid, detergent, ...)

INFO If no addresses appear, the authorised service technician can enter the relevant addresses.

Prime the detergent dispenser pump and dosing tubes

➢ Keep the button pressed.
  ⇨ The background of the button becomes white. The dispenser pump is activated (max. 30 seconds)

Prime the rinse aid dispenser pump and dosing tubes

➢ Keep the button pressed.
  ⇨ The background of the button becomes white. The dispenser pump is activated (max. 30 seconds)

Integrated operating instructions (▶ 13)
- ➢ Press the button.
  - ⇨ The integrated operating instructions appear.

Tips
- ➢ Press the button.
  - ⇨ Tips appear concerning themes such as hygiene, conservation of dishes and economy.

INFO Accessing the integrated operating instructions and tips is possible at any time, even while a wash programme is running.

Additional programmes

INFO The number of additional programmes depends on the programming of the machine.

Energy saving programme

Low-noise programme
for especially quiet washing

Short programme

Special programme
The special programme can be freely programmed by an authorised service technician to your wishes (time, temperature, mechanics, chemistry).

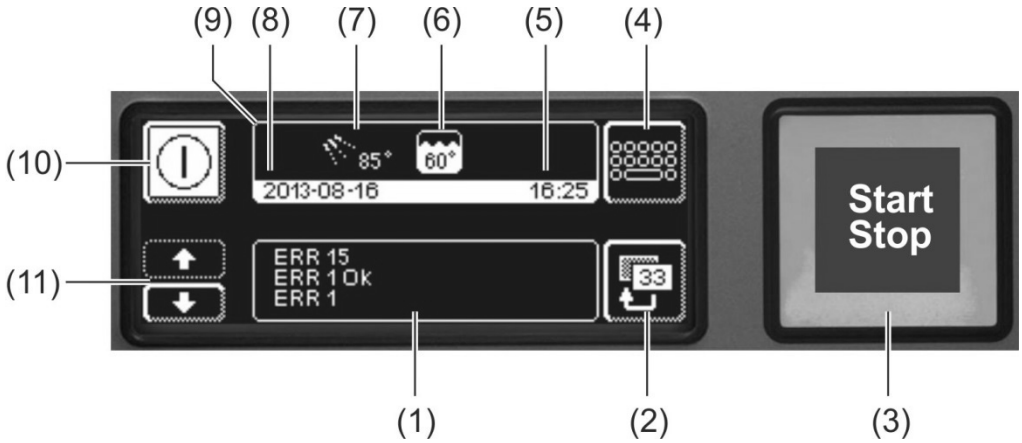
Using the additional programmes

- ➢ Tap on the button of the selected additional programme.
  - ⇨ The background of the button becomes white.
  - ⇨ In the info field the display of the temperature is replaced by the display of the additional programme.
- ➢ Press the start button (3) to start the additional programme.
  - ⇨ The start button (3) lights up in blue.
  - ⇨ The start button (3) flashes green when the additional programme has ended.
  - ⇨ The additional programme remains stored until it is disabled or another additional programme is selected.

11 Info level 2

Calling info level 2

➢ Tap the following buttons in turn:



(1)	Area for displaying events and malfunctions
(2)	Back button
(3)	Start button
(4)	Switch to the PIN Menu (▶ 12)
(5)	Current time
(6)	Current tank temperature
(7)	Current rinse temperature
(8)	Current date
(9)	Info field
(10)	On/Off button (tank will then not be emptied)
(11)	Scroll buttons of area (1)

Events and malfunctions

In this field all events and malfunctions are displayed. Already resolved malfunctions appear here as well.

Example

last entry
⇩ older entries

Display	Explanation
Evt xx	Event (e.g. sequence of a wash programme)
ERR xx	Malfunction
ERR xx OK	Malfunction resolved

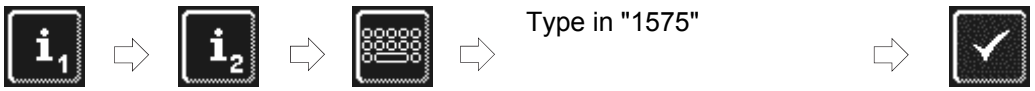
INFO Information with a date can be found in the Hygiene logbook (▶ 12.4).

12 PIN menu

INFO If you switch to the PIN menu, the machine switches off.

Accessing the PIN menu

➢ Tap the following buttons in turn:



Type in "1575"

INFO
Incorrectly entered digits can be corrected with the ← button.

INFO An incorrectly entered PIN is displayed on the screen with the ⚠ symbol. If you have entered your PIN incorrectly five times, the input is locked for 2 minutes.

GB

Overview

General settings (date, time, contrast, language) (▶ 12.1)

Automatic programming On/Off switching (▶ 12.2)

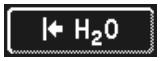
Display the operating data (▶ 12.3)

Accessing the hygiene logbook (▶ 12.4)

Start descaling or basic cleaning programme (▶ 12.5)

Changing the amount of detergent / rinse aid (▶ 12.6)

Set parameters for external dispenser pumps (▶ 18.3)

 Resetting the water countdown indicator (▶ 12.7)

Leaving the PIN menu

➢ Press the button.

12.1 General settings

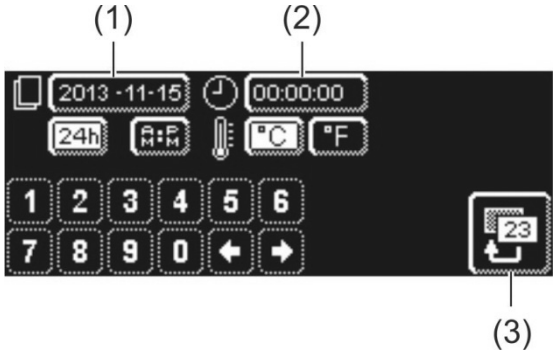
12.1.1 Date, time, temperature unit

Here you can enter the current date and the current time, change the format of the time, and change the temperature unit.

INFO The time must be changed for the summer/winter time changeover.

Retrieving the settings

➢ Tap the following buttons in turn:



Set the date:
- Press the button (1).
- Use the numeric keypad to enter the current date. Format: YYYY-MM-DD (Year-Month-Day)

  INFO During entry, the date is checked for whether it exists. Only plausible dates can be entered.

Setting the time:
- Press the button (2).
- Use the numeric keypad to enter the current time.

Setting the time format:
- Switch between 24-Hour-Mode ("24h") or 12-Hours-Mode ("AM/PM") by pressing the appropriate button.

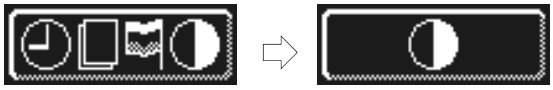
Setting the temperature unit:
- Switch between Degrees Celsius ("°C") and Degrees Fahrenheit ("°F") by pressing the appropriate button.

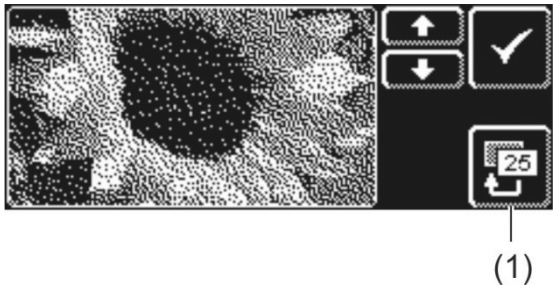
- Press the back button (3) to exit from the menu.

12.1.2 Setting the contrast

Here you can change the contrast to match the display of the screen to the lighting conditions in your kitchen.

Retrieving the settings
- Tap the following buttons in turn:



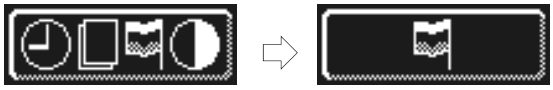


- Change the setting with the ⬆ and ⬇ buttons until all of the data on the display is readable.
- Confirm with the ✓ button.
- Press the back button (1) to exit from the menu.

12.1.3 Setting the language

Here you can set the language in which to display texts on the screen.

Retrieving the settings
- Tap the following buttons in turn:



- Select the required language.
- Press the back button (1) to exit from the menu.

12.2 Automatic switch on / switch off

Here you can:

- programme, when the machine is to fill and heat up automatically.
- programme, when the machine is to switch off automatically.

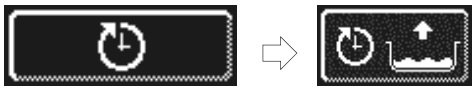
The automatic switching on/off can be set either per day and/or for a special date. If the inputs overlap, a specific date always takes precedence over the weekly programme.

IMPORTANT The following requirements must be met at the time of the automatic switch on:

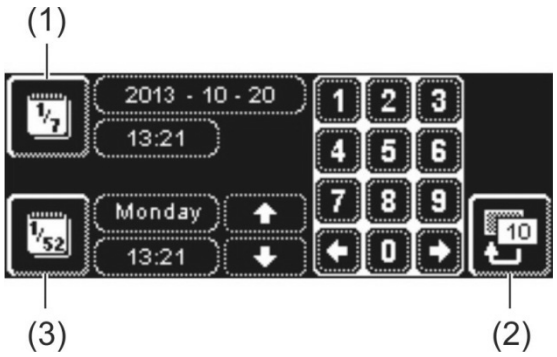
- The hood is closed.
- The on-site mains disconnector is switched on.
- The water stop cock is open.

Automatic switch-on programming

➢ Tap the following buttons in turn:

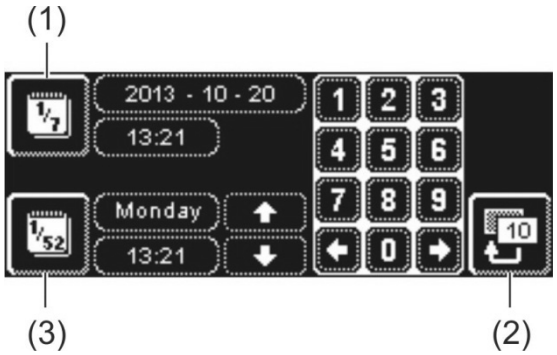


Setting the weekday



➢ Press the button (3).
➢ Use the scroll buttons to select the required weekday.
➢ Tap on the button of the selected weekday.
⇨ The background of the button becomes white.
➢ Enter the time for the start of automatic activation using the numeric keypad.
➢ Repeat the above step as necessary for the other days of the week.
➢ Check whether the button (3) is activated (white background). Only then is automatic switch-on active.
➢ Press the back button (2) to save your input.

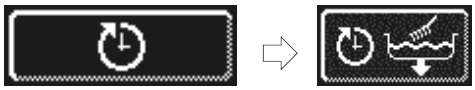
Setting a special date



➢ Press the button (1).
➢ Enter the time and the date for the start of automatic activation using the numeric keypad.
➢ Check whether the button (1) is activated (white background). Only then is automatic switch-on active.
➢ Press the back button (2) to save your input.

INFO The date and time of the next automatic activation are displayed when the machine is switched on. However, the machine can be used before this point of time.

Automatic switch-off programming
Tap the following buttons in turn:



The setting of days of the week or special dates is much the same as for automatic switch on. Proceed as described in this section.

Sequence of the automatic switch off:
- ⇨ 3 short beeps
- ⇨ 10 second pause
- ⇨ 3 short beeps
- ⇨ 10 second pause
- ⇨ 3 short beeps
- ⇨ The machine is emptied and switched off using the self-cleaning programme.

INFO If the hood is open at the time of the automatic switch off, the machine is pumped empty and switched off, but **not** cleaned internally.

12.3 Operating data

Here you can read out all operating data.

Retrieving the operating data

➢ Press the button.

The following operating data is shown on the display.

Commissioning	Date
Next service in[1]	x hours or washing cycles
Total operation hours	x hours
Total washing cycles	x
Total water consumption	x litres
Complete ECO washing cycles[2]	x
Total energy savings[2]	x kWh
Op. hours/day	x hours
Washing cycles/day	x
Water consump./day	x litres
Remaining water softening capacity	x litres
Operating hours Master old[3]	x hours

INFO The display depends on the equipment of the machine.

➢ Press the back button to exit from the menu.

[1] An authorised service technician can activate this function.
[2] only for the PG 8172 ECO
[3] when a new display is installed

12.4 Hygiene logbook

In the hygiene logbook you can:
- retrieve all operating conditions, actions, and failures for one day in chronological order.
- retrieve all hygiene relevant data.

The list starts with the current date and the first event on this day. Then the following events on that day, and then the events of days before. The most important operating data are summarized at the end of each day.

INFO When the memory capacity is reached, the oldest data is deleted as soon as new data is added.

Accessing the hygiene logbook

➢ Press the button.

⇨ The hygiene logbook display then appears:
- The list starts with the current date and the first event on this day.
- This is followed by the events from the days before.

➢ Press the back button to exit from the menu.

12.5 Descaling / basic cleaning

12.5.1 Descaling programme

If the machine is operated with hard water without water treatment, the boiler, the machine interior, all water lines and other components may scale.
Grease residues and dirt that remain in the machine can contribute towards an unhygienic interior and can lead to failure of heating elements. Regular removal of these coatings is absolutely essential.
Using the descaling programme you can descale the interior of the commercial dishwasher. The water lines and the boiler can only be descaled by an authorised service technician.

For descaling, you need an acid-based descaler suitable for commercial dishwashers.

Danger

- When handling chemicals, observe the safety notes and the dosage recommendations on the packaging.
- Wear protective clothing, protective gloves and protective goggles when handling chemicals.

Ideally, start the descaling programme when the machine is empty and switched off. If the machine is already prepared for use, it will automatically empty first.

Only with an external detergent dispenser pump:

Warning

Development of chlorine gas
If you mix active chlorinated detergent and descaler, chlorine gas is produced. Stop the detergent dosing (e.g. remove the suction tube or switch off the dispenser pump).

INFO An internal detergent dispenser pump in the machine will be disabled automatically in the descaling programme.

Starting the descaling programme

- Tap the following buttons in turn:

⇨ The button flashes while the programme is running.

Warning

Descaler causes corrosion
The descaler may not remain in the machine for hours. If you switch off the machine when the descaling programme is in progress or if you terminate the programme, the machine must be emptied, refilled and again emptied. Use the self-cleaning programme for this.

Sequence of the descaling programme:

⇨ With a machine ready for use: The tank is emptied and re-filled **without** detergent.
⇨ With an empty, switched off machine: The tank is filled **without** detergent.
⇨ Once the machine is ready for operation, the text "Add descaler. Press start button." appears.

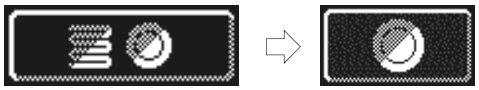
- Open the hood and place descaler inside the machine. Follow the recommended dosage.
  INFO The machine's tank capacity is approx. 35 litres.
- Close the hood and press the start button.
  ⇨ The start button lights up in blue. The button continues to flash.
  ⇨ The descaling solution is circulated in the interior.
  ⇨ On the display, the time counts down from 600 seconds.
  ⇨ Once the time has expired, the button stops flashing.
- Open the hood and check whether the interior has been sufficiently descaled.
  INFO If the hood is not opened within the next 600 seconds, the descaling programme continues automatically and the machine will be emptied.
- Place more descaler in the machine if there are still white coatings. Close the hood and press the start button.
- Press the back button if there are no more white coatings inside the machine.
  ⇨ The machine empties and is then refilled with cold water. Once the desired level is reached, the cold water is circulated for 60 seconds and then drained.
  ⇨ The machine switches off automatically.
- Open the hood and check that the machine has been completely emptied.

12.5.2 Basic cleaning programme

New dishes and new glasses generally have a protective coating, which can be removed by using the basic cleaning programme. The programme can also be used if coatings such as starch have built up on the dishes.

Starting the basic cleaning programme

➢ Tap the following buttons in turn:



⇨ The button flashes while the programme is running.

Sequence of the basic cleaning programme:

⇨ With an empty, switched off machine: The machine is filled and heated up.
⇨ With a machine ready for use: A little water still flows into the boiler.
⇨ Once the machine is ready for operation, the text "Add basic detergent. Press start button." appears.

➢ Open the hood and place basic detergent inside the machine. Follow the recommended dosage.
INFO The machine's tank capacity is approx. 35 litres.
➢ Slide the basket with the dishes to be cleaned into the machine.
➢ Close the hood and press the start button.
⇨ The start button lights up in blue. The button continues to flash.
⇨ The detergent solution is circulated in the interior.
⇨ On the display, the time counts down from 300 seconds.
⇨ This is followed by a drip pause and the rinse.
⇨ Once the time has expired, the button stops flashing and the start button flashes green.
➢ Open the hood and remove the basket from the machine.
➢ As necessary, wash more basekts or press the back button to exit from the menu.

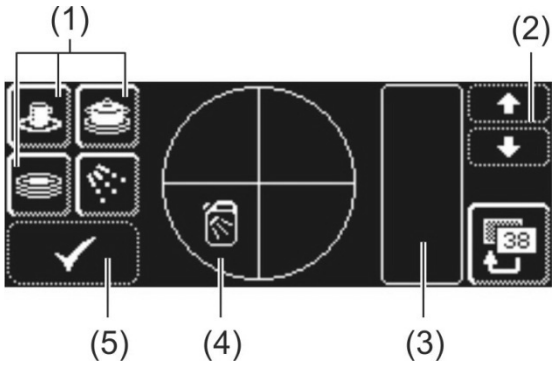
12.6 Changing the amount of detergent / rinse aid

When a new detergent or rinse aid is used, it may be necessary to change the dosing amount. Please observe the dosing recommendations on the packing.
The dosing amount can be adjusted separately for every standard programme.

IMPORTANT In the next menu, only the dosing amount of the internal dispenser pumps is changed. Please consult the corresponding device documents for external dispenser pumps.

Opening the menu

- Press the button.



Changing the detergent dosing amount

- Select a wash programme: press one of the three buttons (1).
  INFO - The display of the three pictograms depends on the type of commercial dishwasher.
  - The dosing amounts for each wash programme can be set separately.
  ⇨ The background of the selected button (1) and button (4) changes to white.
  ⇨ The current detergent dosing amount and the internal name (P003) is displayed in field (3).
- Change the dosing amount with the scroll buttons (2).
- Press the button (5) in order to save the entry.
  ⇨ Button (5) lights up briefly in white.

Changing the rinse aid dosing amount

- Press the button.
  ⇨ The background of the button becomes white.

- The remaining steps are much the same as the steps for changing the detergent dosing amount. Therefore, proceed as in the section "Changing the detergent dosing amount".
- Press the back button to exit from the menu.

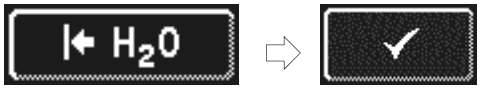
12.7 Resetting the water countdown indicator

The water countdown indicator must be reset if on machines with an external partial or full demineralisation unit this symbol flashes on the screen.

- Contact an authorised service technician to exchange the external partial or full demineralisation unit.

Resetting the water countdown indicator

- Tap the following buttons in turn:



- Press the back button to exit from the menu.

13 Integrated operating instructions

The integrated operating instructions gives a brief description of the operation of the machine.

Retrieving the integrated operating instructions

➢ Tap the following buttons in turn:

14 Customer-specific modifications

The controls of the machine can be adapted to individual needs within certain limits.

Examples

– The pressure can be reduced if mainly light dishes are washed.
– The sound signal at the touch of a button can be disabled.

➢ Contact an authorised service technician for the modifications.

15 Installing the machine and tables

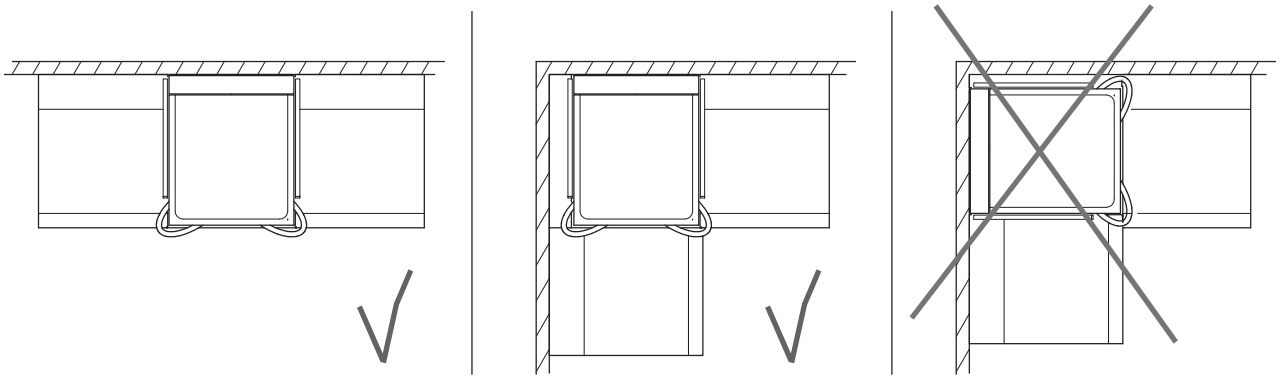
The installation site must be frost-resistant so that the water supply systems do not freeze. If the installation site is not frost-free: ▶ 19.

15.1 Installing the machine

INFO No gap is required between the wall and rear of machine.

➢ Install the machine horizontally with the help of spirit level.
➢ Adjust the base unevenness with the help of the height-adjustable machine feet.

Installation variants

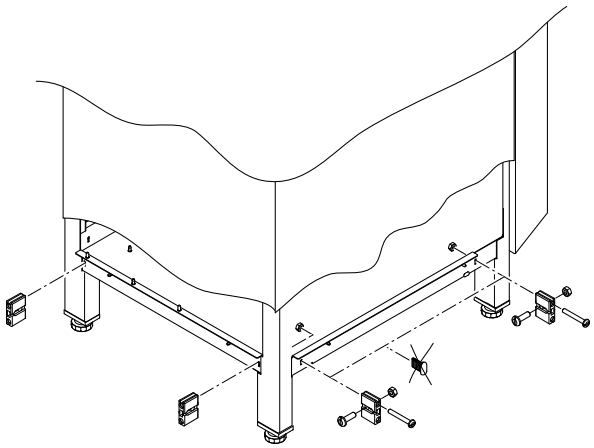


INFO If the machine is installed in a corner, the left hood handle may have to be removed.

15.2 Attaching the tables

Danger

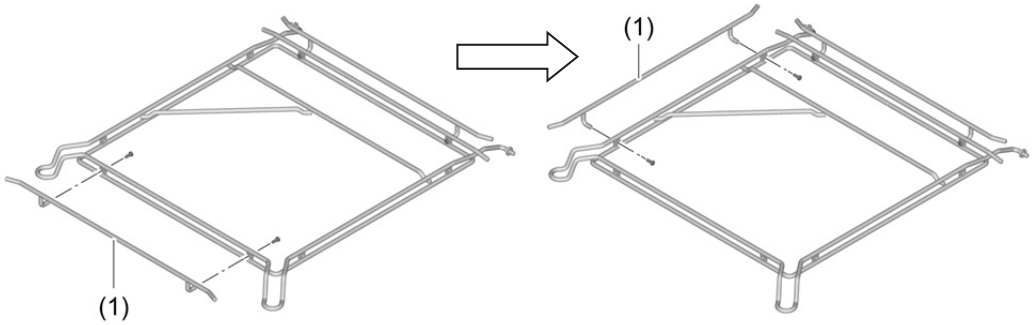
Risk of electric shock
Include tables in the equipotential bonding of the machine.



- Assemble the tables.
- Secure the brace holder to the machine.
  The aluminium strut supports are in the machine.
- Secure the table to the machine.
- Connect the earthing cable from the table to the machine.

15.3 Converting the basket support

If the machine is installed in a corner, the basket support must be converted.



- Unscrew the front guide bar (1) and attach to the left side of the basket support.

With separately available guide bars, the basket support can be converted for the following basket sizes:
- 500 x 500 mm
- 530 x 530 mm
- 530 x 500 mm

16 Water connection

The water-related safety should be as per DIN EN 61770. The machine can be connected to an inlet water supply without an intermediate connection to other safety equipment.

Warning The machine and any other relevant additional devices must be connected by an electrical company authorised by the relevant electricity supplier in relation to local standards and regulations.

INFO At the commissioning of the machine the authorised service technician measures the water hardness and saves it in the machine's electronic control unit.

16.1 Requirements for the on-site inlet water connection

Water quality	The fresh water must in microbiological aspects have the quality of drinking water.
Water inlet temperature	PG 8172: max. 60 °C PG 8172 ECO: Cold water (max. 20 °C)
Water hardness	≤ 3 °dH (3.8 °e / 5.34 °TH / 0.54 mmol/l) (recommendation, to prevent scaling of the machine) ≤ 30 °dH (37.6 °e / 53.4 °TH / 5.35 mmol/l) with machines with an internal water softener
	PG 8172 ECO: ≤ 3 °dH (3.8 °e / 5.34 °TH / 0.54 mmol/l) (recommendation, to prevent scaling of the machine) ≤ 20 °dH (25.1 °e / 35.6 °TH / 3.58 mmol/l) with machines with an internal water softener Connection of osmosis water is not permitted due to the copper pipes in the waste air heat exchanger
Minimum flow pressure	PG 8172: 100 kPa (1.0 bar) PG 8172 ECO: 150 kPa (1.5 bar)
Maximum inlet pressure	600 kPa (6.0 bar)
Flow rate	at least. 4 l/min

16.2 Requirements for the on-site water stop cock

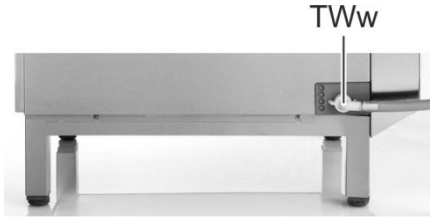
- easily accessible
- not behind the machine
- 3/4" connector

16.3 Connecting the supply hose

Caution The supply hose may not be shortened or damaged.
Old existing hoses may not be re-used.
Do not bend the supply hose while laying it.

The supply hose and dirt trap are located in the machine.

INFO The dirt trap prevents particles from the water supply line entering the machine thus preventing extraneous rust on the cutlery and in the machine.



Right view

- Connecting the supply hose (TWw) to the machine.
- Connect the dirt trap to the on-site water stop cock.
- Only with hot water connections in Great Britain:
  Install the non-return valve between the dirt trap and the supply hose. The non-return valve is located in a bag in the machine.
- Connect the supply hose to the dirt trap.
- Open the water stop cock and test whether the connections are tight.

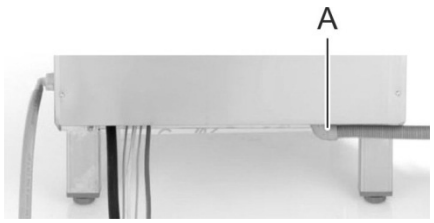
16.4 Connecting the drain hose

Caution

The drain hose may not be shortened or damaged.
Do not bend the drain hose when laying it.

The drain hose is located in the machine.

INFO The machine is equipped with a drain pump. The on-site water drain must have a trap. The maximum height of the on-site water drain is 650 mm.



Back view

- Connect the drain pipe (A) to the machine.
- Connect the drain pipe to the on-site water drain.

17 Electrical connection

Danger

Danger to life: Live components!

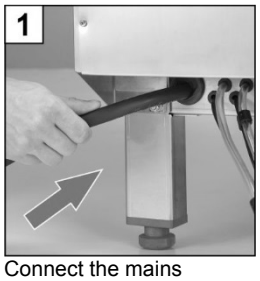
- The machine and the relevant additional devices must be connected by an electrical company authorised by the relevant electricity supplier as per the locally applicable standards and regulations.
- When performing installation and maintenance work, disconnect the machine from the power network. Check that there is no voltage.

- The electrical safety of this machine is guaranteed only if it is connected to a correctly installed protective circuit and a residual current circuit breaker. It is very important that this basic safety requirement is tested and in case of doubt the house installation is checked by a qualified electrician.
- The circuit diagram must be observed.
- The equipment may only be operated at the voltages and frequencies specified on the data plate.
- A fixed connection must as a priority be installed for machines that are delivered without a power cord.
- When the machine must be permanently connected (without a plug), a mains disconnector with all-pole separation from the network must be installed. The mains disconnector switch must have a contact opening width of at least 3 mm, and must also be lockable in the neutral position.
- The electrical connection must be secured as a separately fused circuit with slow fuses or circuit breakers. The protection depends on the total power consumption of the machine. The total connected load is specified on the data plate of the machine
- In the electric supply line, install a universal current sensitive residual-current circuit breaker class B with a tripping current of 30 mA (DIN VDE 0664) as a frequency inverter is located in the machine.
- Machines delivered from the factory equipped with mains cable and safety plug (single phase), or CEE plug are (triple phase), may only be connected to the mains network indicated on the data plate.

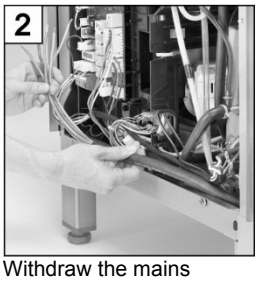
17.1 Connecting the mains cable

Requirements for the mains cable

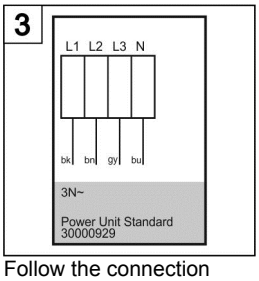
- Cable type: Type H07 RN-F or equivalent
- The wires must be fitted with wire end ferrules.
- Cross section and number of cores: suitable for on-site power and protection for more information see the sticker in the front panel



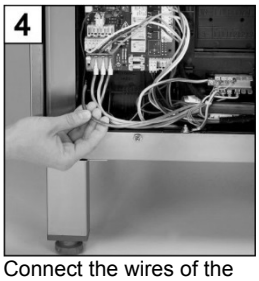
Connect the mains cable to the rear of the machine.



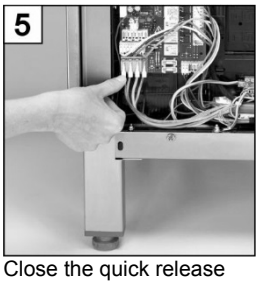
Withdraw the mains cable at the front and route it to the left.



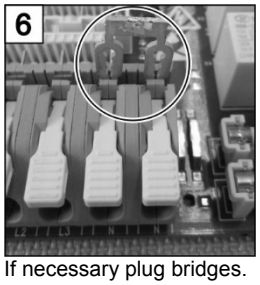
Follow the connection diagram (▶ 17.3).



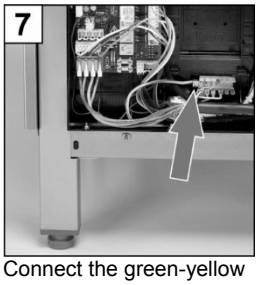
Connect the wires of the mains cable according to the connection diagram.



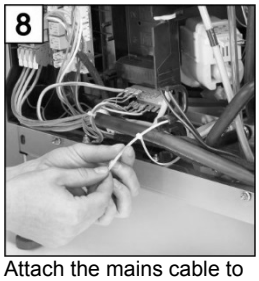
Close the quick release connectors.



If necessary plug bridges. Firmly press the bridges with a screwdriver.



Connect the green-yellow wire to the distributor of the earth wires.



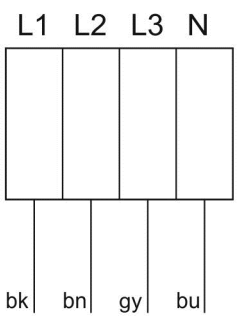
Attach the mains cable to the mounting plate with a cable tie for strain relief.

17.2 Establishing an earth connection

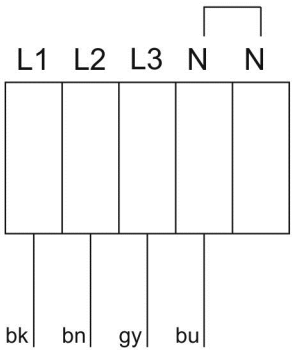
➢ Connect the machine into the on-site equipotential bonding system.

INFO The terminal screw is located behind the right rear leg of the machine. It is identified with the ⏚ symbol.

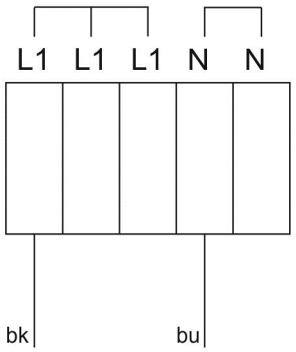
17.3 Connection diagram



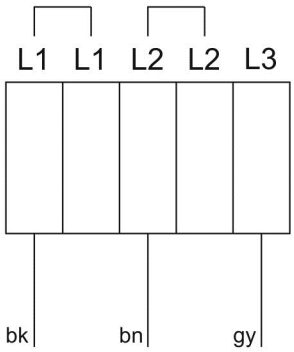
3N~ I ≤ 32 A
Boiler 10,8 kW
Power Unit Standard



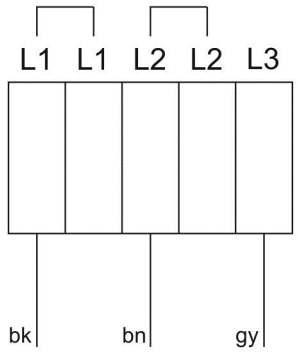
3N~ I ≤ 32 A
Boiler 6,4 kW
Power Unit Universal



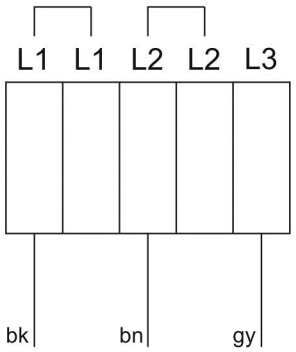
1N~ I ≤ 32 A
Boiler 6,4 kW
Power Unit Universal



230 V, 3~ I ≤ 32 A
Boiler 6,4 kW
Power Unit Universal



200 V, 3~ I ≤ 32 A
Boiler 10,8 kW
Power Unit Universal



208 V, 3~ I ≤ 30 A
Boiler 10,8 kW
Power Unit Universal

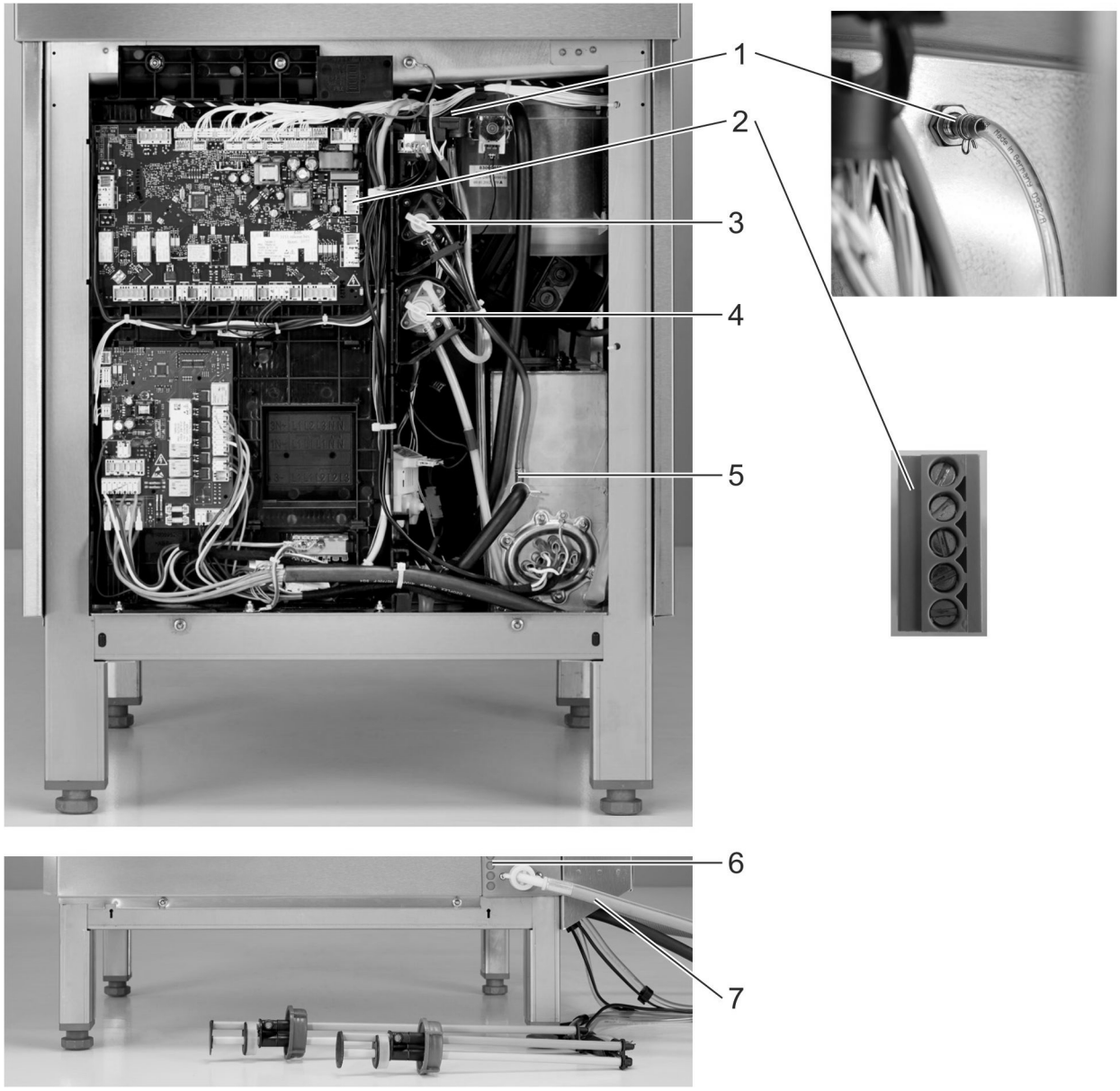
18 External dispenser pumps

Instead of the internal dispenser pump, external dispenser pumps can also be used. Follow the instructions in this chapter.

18.1 Terminals

Danger

Danger to life: Live components!
Have the dispenser pumps installed and commissioned by an authorised service technician.



1	Detergent dosing nipple
2	Connector strip with red plug for the connection of external dispenser pumps
3	Rinse aid dispenser pump
4	Detergent dispenser pump (special equipment)
5	Rinse aid dosing nipple
6	Bushings for hoses and cables
7	Water supply hose

18.2 Electrical connection

IMPORTANT maximum current drain at the connector strip: 0.5 A.

➢ Connect the external dispenser pump to the 5-pin plug.

Terminals (arranged from top to bottom)

Terminal	Voltage is on	Condition	Restriction
L1	Continuous voltage		
N			
Rinse (O18)	parallel to solenoid valve (O7) – while the machine is filling. – during rinsing.	P709 = 0 a)	c)
Wash (O20)	while the circulating pump is running	a)	c), d), e)
Fill / Water (O17)	while the machine is filling.	P704 = 0 a), b)	
	parallel to solenoid valve (O7) – while the machine is filling. – during rinsing.	P704 = 1 a), b)	

a) Hood / door closed
b) Minimum water level in the tank
c) Not in the self-cleaning programme
d) Not while the machine is filling
e) Not in descaling or basic cleaning programme

The parameters P704 and P709 control when a voltage is present at the fill and rinse terminals.

Possible settings

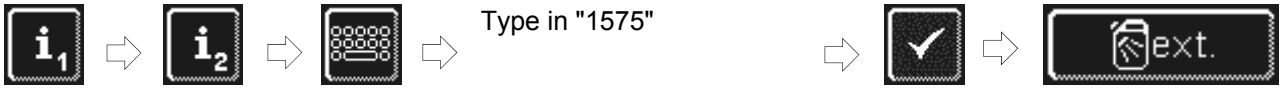
P704	Use
0	for dispenser pumps installed outside the machine
1	for dispenser pumps installed outside the machine
2	for dispenser pumps installed outside the machine
3	for internal dispenser pumps

P709	Use
0	for dispenser pumps installed outside the machine
1	not used
2	for internal dispenser pumps

18.3 Setting the parameters

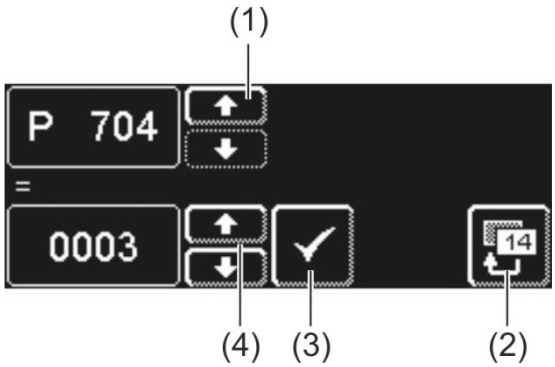
Retrieving the settings

➢ Tap the following buttons in turn:



Type in "1575"

INFO
Incorrectly entered digits can be corrected with the ← button.



➢ Using the scroll buttons (4), set the value of parameter P704.
➢ Press the button (3) to save your input.
➢ Press the scroll button (1) if parameter P709 must also be set.
⇨ P709 is displayed.
➢ Using the scroll buttons (4), set the value of parameter P709.
➢ Press the button (3) to save your input.
➢ Press the back button (2) to exit from the menu.

GB

19 Taking the machine out of service for a long period

Follow the notes if the machine needs to be out of operation for a long duration (holidays, seasonal business).

➢ Empty the machine using the self-cleaning programme (▶ 8.1.2).
➢ Clean the machine (▶ 8.1.3 and 8.1.4).
➢ Leave the hood open.
➢ Close the on-site water stop cock.
➢ Switch off the on-site mains disconnector.

If the machine is in a place that is not frost-free:
➢ Instruct an authorised service technician to make the machine frost-resistant.

20 Putting the machine back into service after a long period of disuse

➢ Open the on-site water stop cock.
➢ Switch on the on-site mains disconnector.
➢ Switch on the machine.

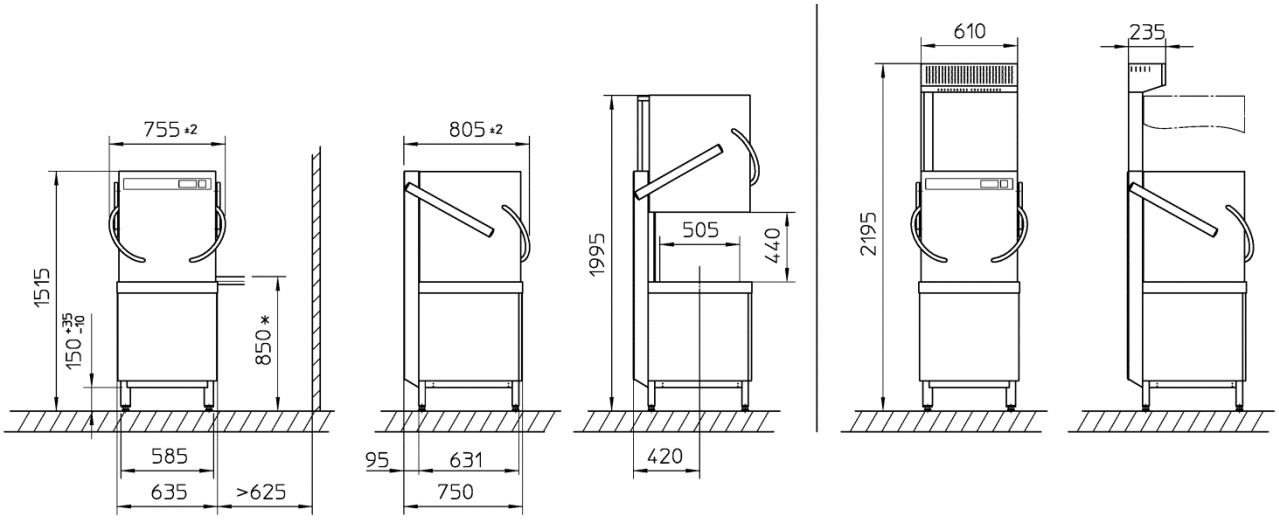
If the machine was in a place that was not frost-free:
After extended periods of disuse, the machine must be completely climatised (at least 24 hours at 25 °C). If this requirement is met:
➢ Contact an authorised service technician to put the machine back into service.

21 Technical Information

Voltage	see data plate
Total connection value	
Fuse	
Minimum flow pressure	▶ 16.1
Maximum inlet pressure	
Water inlet temperature	

Dimensions

PG 8172 **PG 8172 ECO**



*) Working height optional, also 900 mm instead of 850 mm.
The vertical dimensions then increase by 50 mm.

22 Emissions

Noise

Workplace-related emission sound pressure level Leq = 62.7 dBA
Measurement uncertainty: K(pA): 4 dB

Exhaust air

Adhere to the VDI Guideline 2052 when designing the ventilation system.

23 Disposal

Contact your dealer so that the materials in the machine can be reused or disposed of in accordance with local legislation.

Deutschland
Miele & Cie. KG
Vertriebsgesellschaft Deutschland
Geschäftsbereich Professional
Carl-Miele-Straße 29
33332 Gütersloh
Tel: 0 800 22 44 644
Fax: 0 800 33 55 533
Internet: www.miele-professional.de

Schweiz / Suisse / Svizzera
Miele AG
Limmatstrasse 4
8957 Spreitenbach
Tel: 056 417 20 00 Zentrale
Tel: 056 417 27 51
Fax: 056 417 24 69
Reparatur- und Pikettservice: 0800 551 670
Miele Service Professional 0 800 551 670
E-mail: info.mieleprofessional@miele.ch
Internet: www.miele-professional.ch

France
MIELE S.A.S.
93151 - Le Blanc-Mesnil CEDEX
9 av. Albert Einstein - Z. I. du Coudray
Tél: 01 49 39 44 00
Fax: 01 49 39 44 38
R.C.S. Bobigny B 708 203 088
E-mail: miele.pro@miele.fr
Internet: www.miele.fr
Accessoires et pièces détachées
Tél: 0 892 68 70 35
(0,34 € TTC/mn)
E-mail: email.pieces@miele.fr

Italia
Miele Italia S.r.l.
39057 Appiano
S. Michele (BZ)
Strada di Circonvallazione, 27
E-mail: info@miele-professional.it
Internet: www.miele-professional.it

Agenzie e centri di assistenza tecnica autorizzati Miele in tutte le regioni italiane.

Tel: 0471 666319 (Contact Center Professional)
Lu-Ve 8.00-18.00

Österreich
Miele Gesellschaft m.b.H.
Mielestraße 1
5071 Wals bei Salzburg
Tel: 050 800 420
Fax: 050 800 81 429
Internet: www.miele-professional.at
E-Mail: vertrieb-professional@miele.at
Werkskundendienst: 050 800 390
(Festnetz zum Ortstarif; Mobilfunkgebühren abweichend)

Nederland
Miele Professional
De Limiet 2
Postbus 166
4130 ED VIANEN
Telefoon afdeling Customer Service Professional
Tel: (03 47) 37 88 84
Fax: (03 47) 37 84 29
E-mail: professional@miele.nl
(verkoop & algemene vragen)
E-mail: msp@miele.nl
(service & onderhoud)
Internet: www.miele-professional.nl

Luxemburg
Miele S.à r.l.
20, rue Christophe Plantin
Postfach 1011
L-1010 Luxemburg/Gasperich
Tel: 4 97 11 30 (Werkkundendienst)
Tel: 4 97 11 45 (Produktinformation)
Mo-Do 8.30-12.30, 13-17 Uhr
Fr 8.30-12.30, 13-16 Uhr
Fax: 4 97 11 39
E-mail: infolux@miele.lu
Internet: www.miele.lu

Belgique / België
Miele Belgique S.A. / Miele België N.V.
Z.5 Mollem 480
Hof de Bollebeeklaan 9
1730 Mollem (Asse)
Tel: 02 451 15 40
Fax: 02 451 14 14
Tel. Réparations à domicile /
Tel. Herstellingen aan huis: 02 451 16 18
E-mail: infopro@miele.be
Internet: www.miele-professional.be

United Kingdom
Miele Co. Ltd.
Fairacres, Marcham Road
Abingdon, Oxon, OX14 1TW
Tel: 0845 365 0555
Customer Contact Centre Tel: 0845 365 6600
E-mail: info@miele.co.uk
Internet: www.miele.co.uk

China
Miele (Shanghai) Trading Ltd.
1-3 Floor, No. 82 Shi Men Yi Road
Jing' an District
200040 Shanghai, PRC
Tel: 021 6157 3500
Fax: 021 6157 3511
E-mail: mieleshanghai@cn.miele.com
Internet: www.miele.cn

Miele (Hong Kong) Limited
41/F- 4101, Manhattan Place
23 Wang Tai Road
Kowloon Bay
Hong Kong
Tel: 02610 1331
Fax: 02610 1013
E-mail: mielehk@miele.com.hk

India
Miele India Pvt. Ltd.
Ground Floor, Copia Corporate Suites
Plot No. 9, Jasola
New Delhi -110025
Tel: 011 46 900 000
Fax: 011 46 900 001
E-mail: customercare@miele.in
Internet: www.miele.in

Ireland
Miele Ireland Ltd.
2024 Bianconi Avenue
Citywest Business Campus, Dublin 24
Tel: 01 461 07 10
Fax: 01 461 07 97
E-mail: info@miele.ie
Internet: www.miele.ie

Singapore
Miele Southeast Asia
Miele Pte. Ltd.
163 Penang Road
04 – 02/03 Winsland House II
Singapore 238463
Tel: 6735 1191
Fax: 6735 1161
E-mail: infosea@miele.com.sg
Internet: www.miele.sg

South Africa
Miele (Pty) Ltd
63 Peter Place, Bryanston 2194
P.O. Box 69434, Bryanston 2021
Tel: 011 875 9000
Fax: 011 875 9035
E-mail: info@miele.co.za
Internet: www.miele.co.za

United Arab Emirates
Miele Appliances Ltd.
P.O. Box 11 47 82
Gold & Diamond Park
Sheikh Zayed Road
Building 6 / Offices Nos. 217
Dubai
Tel: 04 341 84 44
Fax: 04 341 88 52
E-mail: info@miele.ae
Internet: www.miele-professional.ae

Canada
Miele Limited
161 Four Valley Drive
Vaughan
Ontario L4K 4V8
Tel: 905 660-9936
Fax: 905 532-2290
E-mail: customercare@miele.ca
Internet: www.miele.ca

Miele & Cie. KG
Carl-Miele-Straße 29
33332 Gütersloh
Telefon +49 5241 89-0, Fax +49 5241 89-2090
Internet: http://www.miele.de

Änderungen vorbehalten / Erstellung 09.09.2013

M.-Nr. 09 601 300

CE